

Proposed 2018-19

Area of Study: SETMA
Program CIP Code: 14.0101
Program ID: ENGINEERING.GEN.AS

Engineering
Associate of Science Degree
Mechanical / Civil / Industrial Emphasis

The Associate of Science in Engineering is intended to match closely the curriculum of the first two years of study in most university engineering programs.

To receive an Associate of Science in Engineering, students must: (a) make a minimum grade of C in all required math and science courses and (b) have an overall GPA of 2.0 or greater.

Semester I		Credit Hours
EDUC 1100	<u>Effective Learning: Strategies for College Success</u> ¹	1
+ MATH 2413	<u>Calculus I</u> ²	4
+ ENGL 1301	English Composition I	3
+ ENGR 1201	Introduction to Engineering	2
+ CHEM 1311	General Chemistry I - Lecture	3
+ CHEM 1111	General Chemistry I - Lab	1
		<hr/> 14
Semester II		
+ MATH 2414	Calculus II	4
+ PHYS 2425	<u>Engineering Physics I</u> ³	4
+ ENGL 1302	English Composition II ¹³	3
HIST 1301	<u>United States History I</u> ⁴	3
ARTS 1303	<u>Art History I</u> ⁵	3
		<hr/> 17
Semester III		
ENGR 2301	Vector Mechanics – Statics	3
+ MATH 2415	<u>Calculus III</u> ⁷	4
+ PHYS 2426	<u>Engineering Physics II</u> ⁸	4
GOVT 2305	United States Government	3
		<hr/> 14
Semester IV		
HIST 1302	<u>United States History II</u> ⁹	3
PHIL 2306	<u>Ethics</u> ¹⁰	3
ECON 2301	<u>Principles of Macroeconomics</u> ¹¹	3
GOVT 2306	Texas State and Local Government	3
ENGR 2302	Vector Mechanics – Dynamics	3
	OR	
ENGR 2332	Mechanics of Materials	3
		<hr/> 15
TOTALS		<hr/> 60

⁺Prerequisites: See Course Descriptions

¹All first time Austin Community College (ACC) students with fewer than 12 SCH of successful college credit must take EDUC 1300 in their first semester at ACC. All other students may select either EDUC 1300 or a SPCH course from the Component Area Option List of courses in the Core Curriculum Course List. See an advisor or a full-time faculty member in Engineering for more information.

²Students should consult with a full time mathematics instructor since one or more mathematics courses may be required before enrolling in MATH 2413.

³Students lacking one full year of (recent) high school physics should take PHYS 1401 before taking PHYS 2425. All students must complete MATH 2413 before enrolling in PHYS 2425.

⁴Select from the following courses: HIST 1301, HIST 2301, HIST 2327, or HIST 2381. HIST 2301 and HIST 2381 may only be taken once.

⁵Or choose a course from the Creative Arts section of the Core Curriculum Course List. Check with prospective transfer institutions for transferability.

⁷MATH 2420 is no longer required for the degree; however, it is strongly recommended.

⁸Credit for PHYS 2425 and credit for MATH 2414 are strictly required prerequisites for PHYS 2426.

⁹Select from the following courses: HIST 1302, HIST 2301, HIST 2327, or HIST 2381. HIST 2301 and HIST 2381 may only be taken once.

¹⁰Or choose a course from the Component Area Option section of the Core Curriculum Course List. Check with prospective transfer institutions for transferability.

¹¹Or choose a course from the Social and Behavioral section of the Core Curriculum Course List. Check with prospective transfer institutions for transferability.

¹³You may also select ENGL 2311 to fulfil this requirement for the AS degree. Check with your transfer institution to see if they accept your choice.